Abstract

With the help of a method of selective removal of hydrogen sulphides, organic sulphur components and CO_2 from crude gases, by using a first and second absorption stage (41 or 49) for separating almost pure CO_2, a solution has to be found, with which, among other things, hydrogen sulphides and organic sulphur compounds can be removed in as selective a manner as possible.

This is achieved as follows: the absorption agent coming out of the first absorption stage (41) and enriched with hydrogen sulphide and CO_2 a.o., is pre-heated to an increased pressure with the hot-regenerated solution (12) coming from the desorption stage (50) in a heat exchanger (44), and then at the selected higher pressure de-stressed in a high pressure flash container (47), whereby the gas flow released at the increased pressure is cooled in a condenser (48) and then guided to the second absorption stage (49), in which the sulphur components are completely removed with the help of a part-flow of the regenerated absorption agent (15, 16, 17) coming from the desorption stage (50), whereby the absorption agent is guided back (26/27) from the second absorption stage (49) into the desorption stage (50).

Also refer to the drawing published: Fig.1